

Statement of Basis of the Federal Operating Permit

Ascend Performance Materials Texas Inc.

Site/Area Name: Environmental Control Unit

Physical location: Located on FM 2917 approximately 8 Miles South of the intersection of Texas Hwy 35 and FM 2917

Nearest City: Alvin

County: Brazoria

Permit Number: O2325

Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2869

SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

- A description of the facility/area process description;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: August 12, 2015

Operating Permit Basis of Determination

Permit Area Process Description

Utility Water Treatment System

In Department 377, raw water from the Brazos River comes to the plant from an off-site reservoir. Traveling screen filters remove the large sized trash and debris before going to clarifiers for removal of suspended materials. This clarified water then serves as plant firewater, maintenance utility water, cooling tower makeup water, and makeup water to the filtered water system. Sludge that is produced can be pumped to lagoons for further treatment.

In Department 371 clarified water is further filtered to remove fine solids. This filtered water can be treated to make potable drinking water for plant personnel, or be sent for further treatment to generate the different types of waters required by the plant. The sludge that collects in the filters is backwashed and sent to the Sludge Pit, where it can be recycled to the clarifier.

In Department 378, the filtered water is “polished” in resin beds to remove soluble salts before being sent to the various process units or for further treatment in the Reverse Osmosis unit that is owned and operated by Evoqua. This water is used to make medium pressure boiler feedwater. In case of upsets, the Reverse Osmosis water can be fed to a demineralization trailer to make high pressure boiler feedwater for the plant. .

In Department 350 “Polished” water is deaerated and demineralized to remove any oxygen and soluble minerals. Two levels of feed water are generated (medium pressure and high pressure) and pumped to the utility boiler or to the process unit steam generators. Deaeration is the process of removing oxygen and other non-combustibles from boiler feedwater. During the process the temperature of the water is increased to approximately 300 degrees F. There are two deaeration systems at ECU. The high pressure deaerator (HPDA) uses return condensate and/or demineralized water, steam, and chemicals to produce high pressure boiler feedwater. The medium pressure deaerator uses Reverse Osmosis water, return condensate (when available), steam, and chemicals to produce medium pressure boiler feedwater.

Steam/Electrical Generation

One natural gas fired plant boiler (EPN 350H1-1) generates high-pressure steam for the various processes at the site. Treated High Pressure Boiler Feedwater from the plant water treating system is used to make the steam. Steam quality is maintained by continuously taking a blowdown off the mud drums of the boiler. This blowdown goes directly to the plant ditch system and eventually to the plant outfall for discharge into Chocolate Bayou.

Electricity produced as high pressure steam (from ECU and AN-2 & -3 Units) is letdown to medium pressure steam through a Turbine-Generator (365Z1). Additional electricity is produced from a second Turbine-Generator-Condenser (369Z1) that is driven by medium pressure steam. Most of the medium pressure steam used in 369Z1 is generated in the AN-7 Unit; although, excess medium pressure steam from the plant can be used as well. A condenser is part of the system so that condensate can be returned for use as either high pressure boiler feedwater or medium pressure boiler feedwater

Injection Well Pretreatment System

Non-hazardous process wastewater from the Linear Alkyl Benzene (LAB), Diphenyl Oxide (DPO)/Formalin, Nitrilotriacetic Acid (NTA), and Disodium-Iminodiacetic Acid (DSIDA) processes are mixed with sulfite as an oxygen scavenger before going to Settling Tanks for removal of any solids and being pumped down an injection well. Vapors from the Settling Tanks go to a scrubber/carbon filtration system to remove any organics before being discharged to the atmosphere.

RCRA hazardous wastewater from AN-2, AN-3, and AN-7 Units at the Chocolate Bayou Plant go to a Solids Separation System to remove catalyst solids. The resulting solids free stream is then pH adjusted before going to Equalization Tanks which serve as surge tanks to even out the flow before being pumped to the plant injection wells.

Cooling Towers

Three plant cooling towers receive make-up water from the plant water treating system. Water is pumped to the various plant process units where it is used to maintain the process units' heat balances before being returned to the towers where the water is cooled before being returned to the process units. Water chemistry (conductivity) is maintained by taking a continuous blowdown from the basin of each tower. The blowdown water goes to the plant outfall for discharge to Chocolate Bayou.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1258, O2260, O2318, O2321, O2322, O2323, O2324

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NOX, HAPS, CO
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Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements
 - Protection of Stratosphere Ozone
 - Permit Location
 - Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary

- Unit Summary
 - Applicable Requirements Summary
- Additional Monitoring Requirements
- Permit Shield
- New Source Review Authorization References
- Compliance Plan
- Alternative Requirements
- Appendix A
 - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When

necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed either before or after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce

visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	No
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests

that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.

26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled “Basis of Determination.” Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column “Changes and Exceptions to RRT.” If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word “None” will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled “Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected.”

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need

to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination *
E333P3-1DE	30 TAC Chapter 117, Subchapter B	R5117	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
E333P3-1DE	40 CFR Part 60, Subpart IIII	60IIII	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before July 11, 2005.
E333P3-1DE	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
E333P3-2DE	30 TAC Chapter 117, Subchapter B	R5117	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
E333P3-2DE	40 CFR Part 60, Subpart IIII	60IIII	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before July 11, 2005.
E333P3-2DE	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
E333P3-3DE	30 TAC Chapter 117, Subchapter B	R5117	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
E333P3-3DE	40 CFR Part 60, Subpart IIII	60IIII	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before July 11, 2005.
E333P3-3DE	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake hp greater than or equal to 300 hp and less than or equal to 500 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine

Unit ID	Regulation	Index Number	Basis of Determination*
E333P3-4DE	30 TAC Chapter 117, Subchapter B	R5117	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
E333P3-4DE	40 CFR Part 60, Subpart IIII	60IIII	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before July 11, 2005.
E333P3-4DE	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake hp greater than 500. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
E333P3-5DE	30 TAC Chapter 117, Subchapter B	R5117	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
E333P3-5DE	40 CFR Part 60, Subpart IIII	60IIII	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before July 11, 2005.
E333P3-5DE	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake hp greater than 500. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
E332S1-1	40 CFR Part 63, Subpart FFFF	63FFFF	Process Wastewater = Tank receives, manages or treats process wastewater as defined in 40 CFR Part 63, Subpart F and 40 CFR § 63.2485(b). Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank sparged. Wastewater Tank Properties = Volume of the wastewater tank is less than 75 m ³ and storing liquid with any vapor pressure,
E332S1-1	40 CFR Part 63, Subpart G	63G	Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148 Negative Pressure = The fixed roof and closed vent systems are not operated and maintained under negative pressure. Process Wastewater = The tank receives, manages, or treats process wastewater streams Regenerate On-site = Carbon adsorption bed is not regenerated directly onsite. Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged. By-pass Lines = No by-pass lines Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148 Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Performance Test = Performance tests are not conducted using the methods and procedures specified in § 63.145(i).</p> <p>Wastewater Tank Properties = Volume of the wastewater tank is less than 75m³ and storing liquid with any vapor pressure</p> <p>95% Reduction Efficiency = Performance test demonstrates compliance with the 95% reduction requirement.</p> <p>By-pass Lines = Closed vent system has no by-pass lines</p> <p>Control Device Type = Carbon adsorber</p> <p>Emission Control Type = Fixed roof tank vented through a closed vent system that routes the organic HAP vapors vented from the wastewater tank to a control device</p> <p>Combination of Control Devices = The vent stream is treated using a single control device.</p> <p>Monitoring Options = Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval.</p> <p>Control Device Type = Carbon adsorber</p> <p>Design Evaluation Submitted = Results of performance tests of the emission control system were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p> <p>Compliance with 40 CFR 63.139(c)(1) = The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i)</p> <p>Alternate Monitoring Parameters = Alternate monitoring parameters for the control device have not been requested or approved.</p>
E332S1-2	40 CFR Part 63, Subpart FFFF	63FFFF	<p>Process Wastewater = Tank receives, manages or treats process wastewater as defined in 40 CFR Part 63, Subpart F and 40 CFR § 63.2485(b).</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank sparged.</p> <p>Meets § 63.149(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Wastewater Tank Properties = Volume of the wastewater tank is less than 75 m³ and storing liquid with any vapor pressure,</p>
E332S1-2	40 CFR Part 63, Subpart G	63G	<p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Negative Pressure = The fixed roof and closed vent systems are not operated and maintained under negative pressure.</p> <p>Process Wastewater = The tank receives, manages, or treats process wastewater streams</p> <p>Regenerate On-site = Carbon adsorption bed is not regenerated directly onsite.</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>By-pass Lines = No by-pass lines</p> <p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Performance Test = Performance tests are not conducted using the methods and procedures specified in § 63.145(i).</p> <p>Wastewater Tank Properties = Volume of the wastewater tank is less than 75m³ and storing liquid with any vapor pressure</p> <p>95% Reduction Efficiency = Performance test demonstrates compliance with the 95% reduction requirement.</p> <p>By-pass Lines = Closed vent system has no by-pass lines</p> <p>Control Device Type = Carbon adsorber</p> <p>Emission Control Type = Fixed roof tank vented through a closed vent system that routes the organic HAP vapors vented from the wastewater tank to a control device</p> <p>Combination of Control Devices = The vent stream is treated using a single control device.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Monitoring Options = Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval.</p> <p>Control Device Type = Carbon adsorber</p> <p>Design Evaluation Submitted = Results of performance tests of the emission control system were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p> <p>Compliance with 40 CFR 63.139(c)(1) = The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i)</p> <p>Alternate Monitoring Parameters = Alternate monitoring parameters for the control device have not been requested or approved.</p>
E332T1-1	40 CFR Part 63, Subpart G	63G	<p>Process Wastewater = The tank receives, manages, or treats process wastewater streams</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Wastewater Tank Properties = Properties do not qualify for exemption</p> <p>Emission Control Type = External floating roof that meets the requirements specified in 40 CFR § 63.119(c), 40 CFR § 63.120(b)(5), and 40 CFR § 63.120(b)(6)</p> <p>New Source = The source is an existing source.</p>
E332T1-2	40 CFR Part 63, Subpart G	63G	<p>Process Wastewater = The tank receives, manages, or treats process wastewater streams</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Wastewater Tank Properties = Properties do not qualify for exemption</p> <p>Emission Control Type = External floating roof that meets the requirements specified in 40 CFR § 63.119(c), 40 CFR § 63.120(b)(5), and 40 CFR § 63.120(b)(6)</p> <p>New Source = The source is an existing source.</p>
E336T1-1	40 CFR Part 63, Subpart G	63G	<p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Negative Pressure = The fixed roof and closed vent systems are not operated and maintained under negative pressure.</p> <p>Process Wastewater = The tank receives, manages, or treats process wastewater streams</p> <p>Regenerate On-site = Carbon adsorption bed is not regenerated directly onsite.</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>By-pass Lines = No by-pass lines</p> <p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Performance Test = Performance tests are not conducted using the methods and procedures specified in § 63.145(i).</p> <p>Wastewater Tank Properties = Volume of the wastewater tank is greater than 75m³ but less than 151m³ and vapor pressure of liquid stored is less than 13.1 kPa</p> <p>95% Reduction Efficiency = Performance test demonstrates compliance with the 95% reduction requirement.</p> <p>By-pass Lines = Closed vent system has no by-pass lines</p> <p>Control Device Type = Carbon adsorber</p> <p>Emission Control Type = Fixed roof tank vented through a closed vent system that routes the organic HAP vapors vented from the</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>wastewater tank to a control device</p> <p>Combination of Control Devices = The vent stream is treated using a single control device.</p> <p>Monitoring Options = Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval.</p> <p>Control Device Type = Carbon adsorber</p> <p>Design Evaluation Submitted = Results of performance tests of the emission control system were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p> <p>Compliance with 40 CFR 63.139(c)(1) = The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i)</p> <p>Alternate Monitoring Parameters = Alternate monitoring parameters for the control device have not been requested or approved.</p>
E336T1-2	40 CFR Part 63, Subpart G	63G	<p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Negative Pressure = The fixed roof and closed vent systems are not operated and maintained under negative pressure.</p> <p>Process Wastewater = The tank receives, manages, or treats process wastewater streams</p> <p>Regenerate On-site = Carbon adsorption bed is not regenerated directly onsite.</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>By-pass Lines = No by-pass lines</p> <p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Performance Test = Performance tests are not conducted using the methods and procedures specified in § 63.145(i).</p> <p>Wastewater Tank Properties = Volume of the wastewater tank is greater than 75m³ but less than 151m³ and vapor pressure of liquid stored is less than 13.1 kPa</p> <p>95% Reduction Efficiency = Performance test demonstrates compliance with the 95% reduction requirement.</p> <p>By-pass Lines = Closed vent system has no by-pass lines</p> <p>Control Device Type = Carbon adsorber</p> <p>Emission Control Type = Fixed roof tank vented through a closed vent system that routes the organic HAP vapors vented from the wastewater tank to a control device</p> <p>Combination of Control Devices = The vent stream is treated using a single control device.</p> <p>Monitoring Options = Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval.</p> <p>Control Device Type = Carbon adsorber</p> <p>Design Evaluation Submitted = Results of performance tests of the emission control system were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p> <p>Compliance with 40 CFR 63.139(c)(1) = The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i)</p> <p>Alternate Monitoring Parameters = Alternate monitoring parameters for the control device have not been requested or approved.</p>
E336T2-1	40 CFR Part 63, Subpart G	63G	<p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Negative Pressure = The fixed roof and closed vent systems are not operated and maintained under negative pressure.</p> <p>Process Wastewater = The tank receives, manages, or treats process wastewater streams</p> <p>Regenerate On-site = Carbon adsorption bed is not regenerated directly onsite.</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>the contents of the tank are sparged.</p> <p>By-pass Lines = No by-pass lines</p> <p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Performance Test = Performance tests are not conducted using the methods and procedures specified in § 63.145(i).</p> <p>Wastewater Tank Properties = Volume of the wastewater tank is greater than 75m³ but less than 151m³ and vapor pressure of liquid stored is less than 13.1 kPa</p> <p>95% Reduction Efficiency = Performance test demonstrates compliance with the 95% reduction requirement.</p> <p>By-pass Lines = Closed vent system has no by-pass lines</p> <p>Control Device Type = Carbon adsorber</p> <p>Emission Control Type = Fixed roof tank vented through a closed vent system that routes the organic HAP vapors vented from the wastewater tank to a control device</p> <p>Combination of Control Devices = The vent stream is treated using a single control device.</p> <p>Monitoring Options = Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval.</p> <p>Control Device Type = Carbon adsorber</p> <p>Design Evaluation Submitted = Results of performance tests of the emission control system were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p> <p>Compliance with 40 CFR 63.139(c)(1) = The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i)</p> <p>Alternate Monitoring Parameters = Alternate monitoring parameters for the control device have not been requested or approved.</p>
E336T2-2	40 CFR Part 63, Subpart G	63G	<p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Negative Pressure = The fixed roof and closed vent systems are not operated and maintained under negative pressure.</p> <p>Process Wastewater = The tank receives, manages, or treats process wastewater streams</p> <p>Regenerate On-site = Carbon adsorption bed is not regenerated directly onsite.</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>By-pass Lines = No by-pass lines</p> <p>Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148</p> <p>Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Performance Test = Performance tests are not conducted using the methods and procedures specified in § 63.145(i).</p> <p>Wastewater Tank Properties = Volume of the wastewater tank is greater than 75m³ but less than 151m³ and vapor pressure of liquid stored is less than 13.1 kPa</p> <p>95% Reduction Efficiency = Performance test demonstrates compliance with the 95% reduction requirement.</p> <p>By-pass Lines = Closed vent system has no by-pass lines</p> <p>Control Device Type = Carbon adsorber</p> <p>Emission Control Type = Fixed roof tank vented through a closed vent system that routes the organic HAP vapors vented from the wastewater tank to a control device</p> <p>Combination of Control Devices = The vent stream is treated using a single control device.</p> <p>Monitoring Options = Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Control Device Type = Carbon adsorber</p> <p>Design Evaluation Submitted = Results of performance tests of the emission control system were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p> <p>Compliance with 40 CFR 63.139(c)(1) = The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i)</p> <p>Alternate Monitoring Parameters = Alternate monitoring parameters for the control device have not been requested or approved.</p>
E350H1-1	30 TAC Chapter 117, Subchapter B	R7ICI-16	<p>NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].</p> <p>Unit Type = Other industrial, commercial, or institutional boiler.</p> <p>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>RACT Date Placed in Service = On or before November 15, 1992.</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.</p> <p>Functionally Identical Replacement = Unit is not a functionally identical replacement.</p> <p>CO Monitoring System = Monitored by method other than CEMS or PEMS.</p> <p>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Fuel Type #1 = Natural gas.</p> <p>NOx Emission Limit Average = Emission limit in pounds/MMBtu on a rolling 30-day average.</p> <p>NOx Reductions = No NO_x reduction.</p> <p>Annual Heat Input = Annual heat input is greater than 2.2(10¹¹) Btu/yr, based on rolling 12-month average.</p>
E350H1-1	40 CFR Part 63, Subpart DDDDD	63DDDDD	<p>Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010.</p> <p>HEAT INPUT CAPACITY = RATED HEAT INPUT CAPACITY OF 100 MMBTU/HR OR GREATER</p> <p>FUEL TYPE = NATURAL GAS</p>
E334-GEN	40 CFR Part 63, Subpart YYYY	634Y-3	<p>Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed after 1/14/2003.</p> <p>Rate Peak Power Output = Power output rating is less than one megawatt.</p> <p>Type of Service = Turbine is used exclusively in emergency service.</p> <p>Fuel Fired = Turbine is fired with natural gas.</p> <p>Turbine Combustion Process = Combustion process is diffusion flame combustion.</p> <p>Oxidation Catalyst = The turbine is using continuous monitoring of Administrator approved parameters.</p> <p>Alternate Limitations = Petitioning for no additional operating limitations.</p> <p>Previous Performance Test = No previous performance test was conducted.</p> <p>Distillate Oil Fired = No distillate oil is fired in the turbine.</p>
E341EG6	40 CFR Part 63, Subpart YYYY	634Y-4	<p>Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed on or before 1/14/2003.</p> <p>Rate Peak Power Output = Power output rating is less than one megawatt.</p> <p>Type of Service = Turbine is used exclusively in emergency service.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Fuel Fired = Turbine is fired with natural gas.</p> <p>Turbine Combustion Process = Combustion process is diffusion flame combustion.</p> <p>Oxidation Catalyst = The turbine is using continuous monitoring of Administraor approved parameters.</p> <p>Alternate Limitations = Petitioning for no additional operating limitations.</p> <p>Previous Performance Test = No previous performance test was conducted.</p> <p>Distillate Oil Fired = No distillate oil is fired in the turbine.</p>
E341EG7	40 CFR Part 63, Subpart YYYY	634Y-5	<p>Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed on or before 1/14/2003.</p> <p>Rate Peak Power Output = Power output rating is less than one megawatt.</p> <p>Type of Service = Turbine is used exclusively in emergency service.</p> <p>Fuel Fired = Turbine is fired with natural gas.</p> <p>Turbine Combustion Process = Combustion process is diffusion flame combustion.</p> <p>Oxidation Catalyst = The turbine is using continuous monitoring of Administraor approved parameters.</p> <p>Alternate Limitations = Petitioning for no additional operating limitations.</p> <p>Previous Performance Test = No previous performance test was conducted.</p> <p>Distillate Oil Fired = No distillate oil is fired in the turbine.</p>
E360-EG1	40 CFR Part 63, Subpart YYYY	634Y-1	<p>Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed on or before 1/14/2003.</p> <p>Rate Peak Power Output = Power output rating is less than one megawatt.</p> <p>Type of Service = Turbine is used exclusively in emergency service.</p> <p>Fuel Fired = Turbine is fired with natural gas.</p> <p>Turbine Combustion Process = Combustion process is diffusion flame combustion.</p> <p>Oxidation Catalyst = The turbine is using continuous monitoring of Administraor approved parameters.</p> <p>Alternate Limitations = Petitioning for no additional operating limitations.</p> <p>Previous Performance Test = No previous performance test was conducted.</p> <p>Distillate Oil Fired = No distillate oil is fired in the turbine.</p>
E369Z6EG	40 CFR Part 63, Subpart YYYY	634Y-2	<p>Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed on or before 1/14/2003.</p> <p>Rate Peak Power Output = Power output rating is less than one megawatt.</p> <p>Type of Service = Turbine is used exclusively in emergency service.</p> <p>Fuel Fired = Turbine is fired with natural gas.</p> <p>Turbine Combustion Process = Combustion process is diffusion flame combustion.</p> <p>Oxidation Catalyst = The turbine is using continuous monitoring of Administraor approved parameters.</p> <p>Alternate Limitations = Petitioning for no additional operating limitations.</p> <p>Previous Performance Test = No previous performance test was conducted.</p> <p>Distillate Oil Fired = No distillate oil is fired in the turbine.</p>
70382E6	30 TAC Chapter 115, HRVOC Cooling Towers	R5760	<p>Cooling Tower Heat Exchange System Exemptions = The stream directed to the cooling tower heat exchange system contains less than 5.0% by weight HRVOC.</p> <p>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.</p> <p>Design Capacity = Design capacity to circulate 8000 gpm or greater.</p> <p>Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).</p> <p>Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.</p> <p>Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1).</p> <p>Total Strippalbe VOC = Each individual heat exchanger in the cooling tower heat exchange system has less than 5.0% HRVOC in the process side and compliance with §115.764(d) is chosen.</p> <p>On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.</p>
70382E6	40 CFR Part 63, Subpart Q	63Q-1	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.
E379CT3	30 TAC Chapter 115, HRVOC Cooling Towers	R5760	<p>Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.</p> <p>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.</p> <p>Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.</p> <p>Design Capacity = Design capacity to circulate 8000 gpm or greater.</p> <p>Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).</p> <p>Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.</p> <p>Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1).</p> <p>Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).</p> <p>On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.</p>
E379CT3	40 CFR Part 63, Subpart Q	63Q-2	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.
E379CT4	30 TAC Chapter 115, HRVOC Cooling Towers	R5760	<p>Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.</p> <p>Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.</p> <p>Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.</p> <p>Design Capacity = Design capacity to circulate 8000 gpm or greater.</p> <p>Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a).</p> <p>Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.</p> <p>Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1).</p> <p>Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).</p> <p>On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.</p>
E379CT4	40 CFR Part 63, Subpart Q	63Q-3	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.
E332S1-1	30 TAC Chapter 115, Industrial Wastewater	635	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Carbon adsorber.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p>
E332S1-2	30 TAC Chapter 115, Industrial Wastewater	636	<p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Carbon adsorber.</p>
E332T1-1	30 TAC Chapter 115, Industrial Wastewater	631	<p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = Floating roof or internal floating roof wastewater component tank that does not have a vapor mounted primary seal.</p>
E332T1-2	30 TAC Chapter 115, Industrial Wastewater	634	<p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = Floating roof or internal floating roof wastewater component tank that does not have a vapor mounted primary seal.</p>
E336T2-1	30 TAC Chapter 115, Industrial Wastewater	R5115	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has approved an alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910.</p>
E336T2-2	30 TAC Chapter 115, Industrial Wastewater	R5115	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has approved an alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910.</p>
E332T1-1	40 CFR Part 63, Subpart G	63H-001	<p>Series of Processes = The wastewater stream is treated using a single treatment process.</p> <p>Vented to Control = Emissions from the treatment process are not vented to a control device.</p> <p>Biological Treatment Process = Non-biological treatment process.</p> <p>Wastewater Stream Designation = Group1 for Table 9 compounds.</p> <p>Wastewater Stream Treatment = Resource Conservation and Recovery Act (RCRA) unit option.</p>
E332T1-2	40 CFR Part 63, Subpart G	63H-002	<p>Series of Processes = The wastewater stream is treated using a single treatment process.</p> <p>Vented to Control = Emissions from the treatment process are not vented to a control device.</p> <p>Biological Treatment Process = Non-biological treatment process.</p> <p>Wastewater Stream Designation = Group1 for Table 9 compounds.</p> <p>Wastewater Stream Treatment = Resource Conservation and Recovery Act (RCRA) unit option.</p>

* - The "unit attributes" or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 34029	Issuance Date: 11/25/1996
Authorization No.: 48895	Issuance Date: 06/12/2012
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 03/14/1997
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000
Number: 86	Version No./Date: 06/07/1996
Number: 106	Version No./Date: 06/07/1996
Number: 118	Version No./Date: 06/07/1996
Municipal Solid Waste and Industrial Hazardous Waste Permits With an Air Addendum	
Permit No.: 50189	

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sandblasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit’s compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on July 14, 2015.
Site rating: 14.64 / Satisfactory Company rating: 14.64 / Satisfactory
(*High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55*)
2. Has the permit changed on the basis of the compliance history or site/company rating?No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS?No
2. Is a compliance plan and schedule included in the permit?.....No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes

OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes

OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes